WHAT IS CLAIMED IS:

1. A method for preparing a data packet having a header and a payload for transmission over a radio interface for use in a radio communications network, comprising:

forming the payload for the data packet;

forming the header for the data packet, wherein one of the payload and header contains a data field with one or more bits; and

including in the data packet one or more error correction bits associated with the data field useable by an error correction scheme at a receiver of the data packet to correct an error in the data field.

2. The method in claim 1, wherein the data field is a header data field.

3. The method in claim 1, wherein the data field is a payload data field.

4. The method in claim 1, wherein the data field is associated with one or more error detection bits.

5. The method in claim 1, wherein the one or more error correction bits are positioned in spare or unused bit locations.

6. The method in claim 1, wherein one or more unused bits in the data field are used as the one or more error correction bits.

7. The method in claim 6, wherein the one or more data field bits include multiple bits and the one or more error correction bits correspond to one or more most significant bits of the data field.

8. The method in claim 1, wherein a number of bits in any one or more data fields is used as the one or more error correction bits.

9. The method in claim 8, wherein the number of bits come from multiple data fields.

10. The method in claim 8, wherein the number of bits corresponds to one or more spare bit locations in the data packet.

11. The method in claim 8, wherein the number of bits may vary.

12. A method for processing a data packet transmitted over a radio interface for use in a radio communications network, comprising:

receiving a radio transmission including a data packet having a header and a payload; and

processing the header including processing one or more bits contained in a data field and one or more error correction bits associated with the data field; and

using the one or more error correction bits in an error correction scheme to correct an error in the data field.

13. The method in claim 12, wherein the data field is a header data field.

14. The method in claim 12, wherein the data field is a payload data field.

15. The method in claim 12, wherein the data field includes one or more error detection bits, the method further comprising:

using the one or more error detection bits to detect an occurrence of an error in thein the data field.

16. The method in claim 15, further comprising:

using the error detection and one or more correction bits to detect and correct errors in the data field.

17. The method in claim 12, further comprising:

using the one or more error correction bits to correct one or more bits in the data field.

18. The method in claim 12, wherein the one or more error correction bits are positioned in spare or unused bit locations in the data packet.

19. The method in claim 12, wherein one or more spare or unused bits are used as the one or more error correction bits.

20. The method in claim 19, wherein the one or more data field bits include multiple bits and the one or more error correction bits correspond to one or more most significant bits of the data field.

21. The method in claim 12, wherein a number of bits in any one or more data fields is used as the error correction bits.

22. The method in claim 19, wherein the number of bits corresponds to one or more spare bit locations in the data packet.

23. The method in claim 19, wherein the number of bits may vary, the method further comprising:

adapting the error correction scheme to the variable number of bits used.

24. The method in claim 12, wherein the data field is a transport format indication data field and a transport channel includes a set of available transport format combinations, further comprising:

determining the one or more error correction bits associated with the transport format indication data field based on the set of available transport format combinations.

25. The method in claim 24, further comprising:

using the set of available transport format combinations to correct one or more errors in the header.

26. A data packet header format for use in a data packet having a header and a payload, comprising:

a transport format indication field including one or more bits indicating a transport format for the data packet, and

one or more error correction bits associated with the transport format indication field usable by an error correction scheme at a receiver of the data packet.

27. The data packet header format in claim 24, further comprising:
an error detection field including one or more error detection bits.

28. The data packet header format in claim 24, wherein the one or more error correction bits are positioned in spare or unused bit locations in the header.

29. The data packet header format in claim 24, wherein one or more unused bits in the transport format indication field are used as the one or more error correction bits.

30. The data packet header format in claim 24, wherein the one or more error correction bits correspond to one or more most significant bits of the transport format indication field.

31. The data packet header format in claim 24, wherein a number of bits in any one or more header fields is used as error correction bits.

32. The data packet header format in claim 24, wherein the number of bits corresponds to one or more spare bit locations in the header.

33. The data packet header format in claim 32, wherein the number of bits may vary.

34. The data packet header format in claim 24, wherein a transport channel includes a set of available transport format combinations, and wherein the error correction bits may be determined by a receiver of the data packet based on the set of available transport format combinations.

35. A data packet format for use in a data packet having a header and a payload, comprising:
a data field including one or more bits, and
one or more error correction bits associated with the data field usable by an error correction scheme at a receiver of the data packet to correct an error in the data field.

36. The data packet format in claim 35, further comprising:
an error detection field including one or more error detection bits.

37. The data packet format in claim 35, wherein the one or more error correction bits are positioned in spare or unused bit locations in the data packet.

38. The data packet format in claim 35, wherein one or more unused bits in the data field are used as the one or more error correction bits.

39. The data packet format in claim 35, wherein the one or more error correction bits correspond to one or more most significant bits of the data field.

40. The data packet format in claim 35, wherein a number of bits in any one or more data fields is used as error correction bits.

41. The data packet format in claim 35, wherein the number of bits corresponds to one or more spare bit locations in the data packet.

42. The data packet format in claim 41, wherein the number of bits may vary.

43. The data packet format in claim 35, wherein the data field is in the header.

44. The data packet format in claim 35, wherein the data field is in the payload.

45. A radio unit for preparing a data packet having a header and a payload for transmission over a radio interface for use in a radio communications network, comprising:

processing circuitry capable of forming the payload for the data packet, the header for the data packet, where one of the payload and header contains a data field including one or more bits, and one or more error correction bits associated with the data field useable by an error correction scheme at a receiver of the data packet to correct an error in the data field, and

a transmitter capable of transmitting the data packet over a radio channel.

46. The radio unit in claim 45, wherein the processing circuitry is capable of forming the data packet with one or more error detection bits.

47. The radio unit in claim 45, wherein the one or more error correction bits are positioned in spare or unused bit locations in the data packet.

48. The radio unit in claim 45, wherein one or more spare or unused bits are used as the one or more error correction bits.

49. The radio unit in claim 45, wherein the one or more error correction bits correspond to one or more most significant bits of the data field.

50. The radio unit in claim 45, wherein a number of bits in any one or more data fields is used as the one or more error correction bits.

51. The radio unit in claim 50, wherein the number of bits corresponds to one or more spare bit locations in the data packet.

52. The radio unit in claim 50, wherein the number of bits come from multiple header fields.

53. The radio unit in claim 50, wherein the number of bits may vary.

54. The radio unit in claim 45, wherein the electronic circuitry and transmitter are located in a stationary radio network node.

55. The radio unit in claim 45, wherein the electronic circuitry and transmitter are located in a mobile radio network node.

56. The radio unit in claim 45, wherein the data field is in the header.

57. The radio unit in claim 56, wherein the header data field is a transport format indication field.

58. The radio unit in claim 45, wherein the data field is in the payload.

59. A radio unit for processing data packets transmitted over a radio interface for use in a radio communications network, comprising:

a receiver configured to receive a radio transmission including a data packet having a header and a payload; and

electronic circuitry configured to process a data field in one of the header and payload of the data packet and one or more error correction bits associated with the data field,

wherein the electronic circuitry is configured to use the one or more error correction bits to correct one or more errors in the received data field.

60. The radio unit in claim 59, wherein the data field includes one or more error detection bits, the electronic circuitry being configured to use the one or more error detection bits to detect an occurrence of an error in the data field.

61. The radio unit in claim 60, wherein the electronic circuitry is configured to use the error detection and one or more error correction bits to detect and correct errors in the data field.

62. The radio unit in claim 59, wherein the electronic circuitry is configured to use the one or more error correction bits to correct one or more bits in the data field.

63. The radio unit in claim 59, wherein the one or more error correction bits are positioned in spare or unused bit locations in the data field.

64. The radio unit in claim 59, wherein the one or more error correction bits correspond to one or more most significant bits of the data field.

65. The radio unit in claim 59, wherein a number of bits in any one or more data fields is used as the error correction field.

66. The radio unit in claim 65, wherein the number of bits corresponds to one or more spare bit locations in the data packet.

67. The radio unit in claim 65, wherein the number of bits may vary, and wherein the electronic circuitry is configured to employ an error correction scheme adaptable to the variable number of bits used.

68. The radio unit in claim 59, wherein the data field is in the payload.

69. The radio unit in claim 59, wherein the data field is in the header.

70. The radio unit in claim 59, wherein the data field indicates a transport format for the data packet.

71. The radio unit in claim 70, wherein a transport channel includes a set of available transport format combinations, and wherein the electronic circuitry is configured to determine the error correction bits based on the set of available transport format combinations.

72. The radio unit in claim 71, wherein the electronic circuitry is configured to correct one or more errors in the header using the set of available transport format combinations.